

REMARKS

The Office Action of March 18, 2008, has been carefully considered.

Claims 1-26 have been rejected under 35 USC 112, second paragraph, as indefinite on a number of grounds.

Claims 1-26 have now been canceled and replaced by a new set of Claims 27-54.

Claims 3-4, 6 and 22-26 have been rejected on the basis of the phrase "at least for the most part." Since this term cannot be defined exactly, it has been replaced either by "all" or "at least two."

Antecedent basis objections have been raised for Claims 3, 4, 6, 10 and 11, and the cited problems have been corrected in the new set of claims.

The remaining objections relate to either "in particular" in the claim language or multiple claim ranges in a single claim and the cited problems have also been corrected in the new set of claims.

Withdrawal of this rejection is requested.

Claims 1-11, 13, 16-17, 19-20, 24 and 26 have been rejected under 35 USC 102(b) as being anticipated by Snowden.

The invention is directed to a scalding tunnel for slaughtered animals, which comprises a tunnel having disposed therein along a path of conveyance for slaughtered animals a plurality of multicomponent nozzles, each of the nozzles having a connection to a source of steam and a means for connection to a source of water. The nozzles are constructed and arranged to discharge a mixture of steam and water that is sprayed in the tunnel.

The Office action alleges that Snowden discloses multi-component nozzles with at least one connection for steam and one connection for water, as disclosed at column 5, lines 17-33 and in Figure 3. Applicant submits, however, that the

Office action has not correctly interpreted the reference.

It is known in the art to convey slaughtered animals to a condensation scalding tunnel where the hanging slaughtered animals are subjected to moist air, for removing pig bristles and hairs, for example. The scalding tunnel permits moistening of the animal skin for performing the depilation, while dirt is removed simultaneously. According to U.S. 3,631,563, it is known to spray steam and hot water along the path of conveyance of the slaughtered poultry.

A similar technique can be found in the Snowden reference in which the poultry is conveyed through a housing 10 with a lower section 30, an intermediate portion 48 and an upper portion 50. These portions run inclined relative to the horizontal to create a relatively rapid upper flow of ambient air through the housing (column 4, lines 42-44). At the end of upper end 14 of the housing, a fan 58 can be provided to induce a forced draft of ambient air through the housing (column 5, line 3).

According to the invention, the scalding tunnel is operated with a structurally simple design in an energy efficient manner. The claimed scalding tunnel can be operated under largely homogeneous environmental conditions without the need for circulating devices. These advantages are made possible by nozzles which spray a mixture of steam and water, with a separate input for each.

According to Snowden, column 5, line 17 *et seq*, the lower housing portion 30 and the intermediate housing portion 48 provide a plurality of steam laterals 70a-c. A high temperature spray medium such as steam is applied to the laterals via a steam header 46 and in order to apply steam to the interior of the housing, nozzles are connected along the length of the steam lateral 70a-d (column 5, lines 24 *et seq*). There are no more details provided concerning the structure of

the nozzles, and in particular, there is no disclosure or suggestion of providing separate connections for steam and water.

It is possible to feed water and/or steam into the housing of Snowden; this is disclosed with respect to the use of special oscillating pipes within the housing (column 5, lines 31-32), the oscillating pipes 90a-b, and 92a-b having openings for spray nozzles. Hot water is thereby sprayed outwardly from the pipes (column 6, line 19-20).

Hence, there is no disclosure or suggestion of simultaneously spraying hot water and steam through the nozzles although hot water or steam can be sprayed. Moreover, there is no suggestion as recited in Claim 28 that the multi-component nozzles are arranged such that the atmosphere in the scalding tunnel can be circulated to obtain largely homogeneous environmental conditions. For this purpose, the nozzles of the invention are oriented selectively horizontally and vertically at angles α and β ; there is no such teaching in Snowden.

Thus, while Snowden may disclose injecting water into the steam which is sprayed, or using oscillating pipes to spray water or steam, there is no disclosure of using multicomponent nozzles with a water inlet and a steam inlet in order to simultaneously spray a mixture of water and steam.

Withdrawal of this rejection is accordingly requested.

Claims 12 and 21 have been rejected under 35 USC 103(a) over Snowden in view of Norrie. Norrie discloses a scalding tunnel without ventilation, but this relates to a deluge system (column 3, line 29; column 6, lines 65 et seq), and not a vaporizing system such as is disclosed in Snowden. Norrie, moreover, does not cure the defects of Snowden as discussed above, and withdrawal of this rejection is requested.

Claims 14-15 have been rejected under 35 USC 103(a) over

Snowden, in particular the embodiment of Figure 11. Figure 11 relates to the oscillating spraying nozzle, but does not disclose orienting the multicomponent nozzle of the invention at defined angles which enables circulation of the atmosphere within the scalding tunnel to a required extent. For this purpose, the invention requires orientation of the nozzles with regard to the horizontal or vertical and this disclosure cannot be found in Snowden. Withdrawal of this rejection is requested.

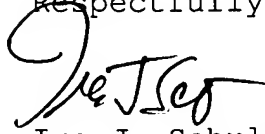
Claims 18 and 23 have been rejected under 35 USC 103(a) over Snowden in view of Wilson et al, which is cited to show the temperature of a steam mixture above 100°C. According to Wilson et al, heat is led through a dewatering chamber, through a steam chamber and through a chilled water chamber, with the chambers being separated from each other. Wilson et al does not provide any nozzles so there cannot be any suggestion as to the temperature of a mixture of steam and water leaving a nozzle. Withdrawal of this rejection is requested.

Claims 22 and 25 have been rejected under 35 USC 103(a) over Snowden. These claims relate to the characteristics of the steam passing through the nozzles, but Snowden still does not disclose or suggest multicomponent nozzles simultaneously spraying water and steam.

Withdrawal of this rejection is requested.

In view of the foregoing amendments and remarks, Applicants submit that the present application is now in condition for allowance. An early allowance of the application with amended claims is earnestly solicited.

Respectfully submitted,



Ira J. Schultz
Registration No. 28666
Attorney for Applicant
(703)837-9600, ext. 23

LAW OFFICES
DENNISON, SCHULTZ & MACDONALD
SUITE 105
1727 KING STREET
ALEXANDRIA, VIRGINIA 22314-2700
703 837-9600